

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A modulator ~~Modulator-system-comprising~~
comprising:
a first modulator ~~for-modulating-configured-to-modulate~~ an input signal according to a first modulation ~~scheme-and~~ scheme;
a second modulator ~~for-modulating-configured-to-modulate~~ the input signal according to a second modulation ~~scheme,-~~ scheme;
~~which-modulator-system-comprises-a~~ compensator ~~for-combining-configured-to~~
combine at least one modulator signal with at least one waveform ~~for-compensating-to~~
compensate at least one signal parameter of an output signal for discontinuities resulting from a modulation scheme ~~change.~~ change, wherein each modulator comprises at least one multiplier
configured to multiply a mapped input signal with a complex valued signal and the compensator
comprises at least one multiplier configured to multiply the at least one modulator signal in the
form of the complex valued signal with the waveform in a form of a complex valued phase offset
with the at least one signal parameter comprising a phase; and
at least one pulse shaper coupled to an output of the compensator.
2. (Currently Amended) The modulator system of claim 1, ~~Modulator-system~~
~~according to claim 1, further comprising at least one pulse shaper with the compensator being~~
~~located after the pulse shaper, further comprising: a least one upsampler coupled between the~~
compensator and the at least one pulse shaper.
3. (Currently Amended) The modulator ~~Modulator-system~~ ~~according to~~
~~claim 2, of claim 2~~ wherein the ~~compensator comprises a multiplier for multiplying the~~

~~modulator signal in the form of at least one pulse shaped modulated signal with the waveform in the form of a complex valued waveform with the at least one signal parameter comprising~~
comprises an amplitude and a phase.

4.-6. (Canceled)

7. (Currently Amended) The modulator ~~Modulator-system according to of~~
~~claim 1, 1~~ wherein the first modulation scheme is a Phase Shift Keying modulating scheme and the second modulation scheme is a Gaussian Minimum Shift Keying modulation scheme.

8. (Currently Amended) A transmitter ~~Transmitter comprising;~~
~~a modulator system comprising a first modulator for modulating configured to~~
modulate an input signal according to a first modulation scheme;
~~and a second modulator for modulating configured to modulate~~ the input signal
according to a second modulation scheme; and
~~which modulator system comprises a compensator for configured to combine~~
~~combining~~ at least one modulator signal with at least one waveform ~~for compensating to~~
compensate at least one signal parameter of an output signal for discontinuities resulting from a
modulation scheme change, wherein each modulator comprises at least one multiplier configured
to multiply a mapped input signal with a complex valued signal and the compensator comprises
at least one multiplier configured to multiply the at least one modulator signal in the form of the
complex valued signal with the waveform in the form of a complex valued phase offset with the
at least one signal parameter comprising a phase;
at least one pulse shaper coupled to an output of the compensator; and
~~which transmitter further comprises a power amplifier for amplifying the~~
configured to amplify an output signal of the transmitter.

9. (Currently Amended) A modulator to modulate ~~Modulator for modulating~~
an input signal according to a modulation scheme, ~~which the modulator comprises comprising:~~

a compensator configured to ~~for combining~~ combine at least one modulator signal with at least one waveform to compensate for ~~for compensating~~ at least one signal parameter of an output signal for discontinuities resulting from a modulation scheme ~~change~~. change, wherein the modulator comprises at least one multiplier configured to multiply a mapped input signal with a complex valued signal and the compensator comprises at least one multiplier configured to multiply the at least one modulator signal in the form of the complex valued signal with the waveform in the form of a complex valued phase offset with the at least one signal parameter comprising a phase; and

at least one pulse shaper coupled to an output of the compensator.

10. (Currently Amended) ~~Method~~ A method of ~~for~~ modulating an input signal according to a first modulation scheme and ~~for~~ modulating the input signal according to a second modulation scheme, ~~which the method comprises~~ comprising: a step of

combining at least one modulator signal with at least one waveform for compensating at least one signal parameter of an output signal for discontinuities resulting from a modulation scheme ~~change~~. change, wherein the at least one modulator signal comprises a mapped input signal multiplied by a complex valued signal and the combining comprises multiplying the at least one modulator signal in the form of the complex valued signal with the waveform in a form of a complex valued phase offset with the at least one signal parameter comprising a phase; and

pulse-shaping the combined at least one modulator signal and at least one waveform.

11. (Currently Amended) ~~A Processor~~ processor program product for causing a computer to perform a method, the method comprising:

modulating an input signal according to a first modulation ~~scheme~~. scheme; and
for

modulating the input signal according to a second modulation ~~scheme~~. scheme;
~~which processor program product comprises a function of~~

combining at least one modulator signal with at least one waveform for compensating at least one signal parameter of an output signal for discontinuities resulting from a modulation scheme ~~change, change,~~ wherein the at least one modulator signal comprises a mapped input signal multiplied by a complex valued signal and the combining comprises multiplying the at least one modulator signal in the form of the complex valued signal with the waveform in a form of a complex valued phase offset with the at least one signal parameter comprising a phase; and
pulse-shaping the combined at least one modulator signal and at least one waveform.

12. (New) The processor product of claim 11 wherein the at least one signal parameter comprises a signal parameter having an amplitude.

13. (New) The method of claim 10 wherein the at least one signal parameter comprises a signal parameter having an amplitude.

14. (New) The modulator of claim 1, further comprising an adder configured to add the pulse-shaped output of the compensator to another pulse-shaped compensated signal.